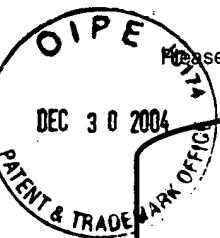


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DEC 30 2004



TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/517,059
Filing Date	March 2, 2000
Inventor(s)	DAUDELIN et al.
Group Art Unit	2681
Examiner Name	Erika A. Gary
Attorney Docket Number	29250-000322/US

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers <i>(for an Application)</i> <input type="checkbox"/> Letter to the Official Draftsperson and _____ Sheets of Formal Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input checked="" type="checkbox"/> APPEAL BRIEF (w/clean version of pending claims) <input type="checkbox"/> Appeal Communication to Group (Notice of Appeal, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) <i>(please identify below):</i>
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.		Attorney Name Gary D. Yacura	Reg. No. 35,416
Signature				
Date	December 30, 2004			

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 500)

Complete if Known	
Application Number	09/517,059
Filing Date	March 2, 2000
First Named Inventor	DAUDELIN et al.
Examiner Name	Erika A. Gary
Art Unit	2681
Attorney Docket No.	29250-000322/US

DEC 30 2004



METHOD OF PAYMENT (check all that apply)

 Check Credit card Money Other None
Order

Deposit Account:

Deposit Account Number

08-0750

Deposit Account Name

Harness, Dickey & Pierce, PLC

The Director is authorized to: (check all that apply)

 Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) or any underpayment of fees under 37 CFR 1.16 and 1.17
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee Code	Fee (\$)	Fee (\$)
1011	2011	300	150
1012	2012	200	100
1013	2013	200	100
1014	2014	300	150
1005	2005	200	100
SUBTOTAL (1)		(\$ 0)	

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
	-20 **	= 0	X = 0
Independent Claims	-3 **	= 0	X = 0
Multiple Dependent			= 0

Large Entity	Small Entity	Fee Description	
Fee Code	Fee Code	Fee (\$)	
1202	2202	50	
1201	2201	200	
1203	2203	360	
1204	2204	200	
1205	2205	50	
SUBTOTAL (2)		(\$ 0)	

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500
1403	1000	2403	500	Request for oral hearing	
1452	500	2452	250	Petition to revive - unavoidable	
1453	1500	2453	750	Petition to revive - unintentional	
1501	1400	2501	700	Utility issue fee (or reissue)	
1502	800	2502	400	Design issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
Other fee (specify) _____		SUBTOTAL (3) (\$500)			

4. SEARCH/EXAMINATION FEES

1111	500	2111	250	Utility Search Fee	
1112	100	2112	50	Design Search Fee	
1113	300	2113	150	Plant Search Fee	
1114	500	2114	250	Reissue Search Fee	
1311	200	2311	100	Utility Examination Fee	
1312	130	2312	65	Design Examination Fee	
1313	160	2313	80	Plant Examination Fee	
1314	600	2314	300	Reissue Examination Fee	
SUBTOTAL (4) (\$0)					

SUBMITTED BY

Name (Print/Type)	Gary D. Yacura	Registration No. (Attorney/Agent)	35,416	Telephone	703-668-8000
Signature			Date	December 30, 2004	

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PATENT APPLICATION



IN THE U.S. PATENT AND TRADEMARK OFFICE

Appellants: DAUDELIN et al.
Application No.: 09/517,059
Art Unit: 2681
Filed: March 2, 2000
Examiner: Erika A. Gary
For: METHOD AND SYSTEM FOR MONITORING AN
OPERATIONAL AREA OF A SUBSCRIBER STATION
Attorney Docket No.: 29250-000322/US

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

December 30, 2004

Sir:

In accordance with the provisions of 37 C.F.R. §41.37, Appellants submit the following:

I. REAL PARTY IN INTEREST:

The real party in interest in this appeal is Lucent Technologies.

01/03/2005 JADDO1 0000004 09517059

01 FC:1401 500.00-OP

01/03/2005 JADDO1 00000029 09517059

01 FC:1402 500.00 OP

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37
U.S. Application No. 09/517,059
Atty. Docket 29250-000322/US

II. RELATED APPEALS AND INTERFERENCES:

There are no known appeals or interferences that will affect, be directly affected by, or have a bearing on the Board's decision in this Appeal.

III. STATUS OF CLAIMS:

Claims 1-25 are pending in the application, with claims 1 and 18 being written in independent form. Appellants canceled no claims during prosecution.

No claims are allowed, and claims 4-17 and 23-25 would be allowed if they were rewritten independent form.

Claims 1, 2, 18, and 19 remain finally rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,711,000 to Ploeg et al. ("Ploeg"). Claims 3 and 20-22 remain finally rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,711,000 to Ploeg et al. ("Ploeg") in view of U.S. Patent No. 6,026,304 to Hilsenrath et al. ("Hilsenrath").

Claims 1-3 and 18-22 are on appeal, and these claims are set forth in the attached Appendix.

IV. STATUS OF AMENDMENTS:

No amendments were filed subsequent to the Final Rejection filed August 3, 2004.

V. SUMMARY OF CLAIMED SUBJECT MATTER:

The claimed invention is directed to a method for monitoring the operational area of one or more subscriber stations.¹ FIG. 1A illustrates a block diagram of a wireless communication system 11 for determining

¹ Page 2, lines 1-2 of the Specification.

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whether one or more subscriber stations 26 are operating within an authorized coverage area 36. Base stations 10 provide coverage defined in terms of cells or sectors thereof. A restricted coverage area 38 and an authorized coverage area 36 may be defined for each corresponding subscriber station 26.²

An authorized coverage area 36 includes a region within a cell or a sector, which the subscriber station 26 is authorized to use. The authorized coverage area 36 in FIG. 1A may be associated with the signal coverage provided by one or more base stations.³ A restricted coverage area 38 includes one or more cells or sectors, or geographic portions thereof, which represent a service area that the subscriber station 26 is not authorized to use. In FIG. 1A, the restricted coverage area 38 is indicated by the dashed lines and surrounds the authorized coverage area 36.⁴

A base station 10 that ordinarily provides coverage to the subscriber station 26 in the authorized coverage area 36 communicates with a base station controller 34.⁵ The base station controller 34 is coupled to a wireless switching center 32. The wireless switching center 32 is coupled to an authentication center 28 and a home location register 30. A subscriber station 26 may transmit to one or more base stations 10 via a reverse channel.⁶

An operational area monitor 12 may be implemented as software instructions on an existing or commercially available base station 10 or by the addition of both hardware and software instructions to an existing base station 10. The operational area monitor 12 includes an antenna monitor

² Page 3, lines 21-25 of the Specification.

³ Page 4, lines 4-5 of the Specification.

⁴ Page 4, lines 9-13 of the Specification.

⁵ Page 4, lines 15-16 of the Specification.

⁶ Page 4, lines 15-21 of the Specification.

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14 and a propagational delay measurer 16 coupled to a processor 18. In turn, the processor 18 is coupled to a storage device 19.⁷

Example Embodiments of the system according to the present invention may be, for example, a code-division multiple access system.⁸ Referring to FIG. 1B, the subscriber station 26 transmits a reverse channel signal to the base station 10. In the context of a code-division multiple access system, the baseband signal modulation includes spreading by a pseudo-random code sequence. To demodulate the signal, a demodulator of the base station 10 must despread the received modulated signal by the same pseudo-random code sequence used for encoding, but by a temporal offset that depends on the delay encountered by the reverse channel signal during propagation between the subscriber station 26 and the base station 10.⁹ A receiver of the base station 10 preferably comprises a rake receiver, which independently demodulates different temporally offset versions of the receive signal 107 from a subscriber station 26 and then combines the different versions, to achieve diversity gain where possible. The rake receiver includes multiple demodulators, which are sometimes referred to as fingers.¹⁰ Each finger of the rake receiver may be dynamically assigned a unique temporal offset, which may be referred to as the propagational delay factor. At a sampling interval, a finger is preferably assigned to a specific propagational delay and a specific antenna. The propagational delay represents a temporal offset which when applied to a reference pseudo-random code allows demodulation of a receive signal by the finger.¹¹

Returning to FIG. 1A, a propagational delay measurer 16 measures the number of observations of various propagational delays for a given

⁷ Page 4, lines 28-29 and Page 5, lines 1-5 of the Specification.

⁸ Page 5, lines 22-23 of the Specification.

⁹ Page 5, lines 22-28 of the Specification.

¹⁰ Page 5, line 28-page 6, line 4 of the Specification.

¹¹ Page 6, lines 12-17 of the Specification.

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subscriber station 26 during a call or data transmission.¹² The propagational delays refer to the different propagational delays that are present in the uplink receive signals that traverse different propagational paths from the subscriber station 26 to the base station 10. As discussed above, in a code-division, multiple-access (CDMA) system, the propagational delay measurer 16 may measure a propagational delay by comparing a reference pseudo-random code sequence with the received pseudo-random code sequence.¹³ The time offset between the reference pseudo-random code sequence and the received pseudo-random code sequence represents the propagational delay factor.¹⁴ Each of the observed propagational delays falls within a range of possible propagational delays between the subscriber station 26 and the base station 10 serving the subscriber station 26 when the subscriber station is operating in the authorized coverage area.¹⁵

A fingerprint refers to a snapshot of the signal characteristics of a received signal 107.¹⁶ The signal characteristics may include, for example, one or more of the following: propagational delay, antenna identifier, and signal quality indicator. Received signals may be assigned to and demodulated by, for example, RAKE receiver fingers of one or more antennas. The operational area monitor 12 may form a composite fingerprint (discussed in more detail below) by periodically collecting the fingerprints of, in one example embodiment, mature fingers. A mature finger is defined as a finger, which has been assigned to a seemingly valid receive signal for a significant period of time (e.g., 200 milliseconds).¹⁷

¹² Page 7, lines 1-4 of the Specification.

¹³ Page 7, lines 4-9 of the Specification.

¹⁴ Page 7, lines 9-10 of the Specification.

¹⁵ Page 7, lines 18-23 of the Specification.

¹⁶ Page 8, lines 8-9 of the Specification.

¹⁷ Page 8, lines 10-16 of the Specification.

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As shown in the flow chart of FIG. 2A, prior to monitoring the operational area of a subscriber station, the operational area monitor 12 takes a characteristic composite fingerprint of a subscriber station 26 in step S100. A characteristic composite fingerprint is a statistical compilation of multiple fingerprints taken while a subscriber station 26 is operating within its authorized operational area. The characteristic composite fingerprint is considered a representative superset of any composite fingerprint taken from the authorized area. The characteristic composite fingerprint provides a reference for subsequent comparison to an operational composite fingerprint.¹⁸ In accordance with a first technique, which may be used in step S100, a composite fingerprint may be defined in terms of a first histogram and a second histogram. The first histogram includes observations of propagational delays taken for a particular subscriber station 26 during a call or data transmission over multiple sampling intervals. The second histogram includes observations per antenna identifier taken for a particular subscriber station during a call or data transmission over multiple sampling intervals.¹⁹

¹⁸ Page 9, lines 6-13 of the Specification.

¹⁹ Page 12, lines 22-28 of the Specification.

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During monitoring, such as during a call, the operational area monitor 12 takes occasional fingerprints of the received signals 107 and forms an operational composite fingerprint in step S102.²⁰ The difference between an operational composite fingerprint and a characteristic composite fingerprint is that the operational composite fingerprint may be associated with any location of the subscriber station, whereas the characteristic composite fingerprint is only associated with an authorized coverage area.²¹ An operational composite fingerprint is a statistical compilation of the data from multiple fingerprints of the received signals 107, which are sampled from a subscriber station 26 during a call duration or data transmission duration.

As discussed above, a composite fingerprint has a distribution of signal characteristics (e.g., propagational delay and antenna identifiers) which are influenced by the location and physical features of the operational area from which the subscriber station 26 transmits.²² If the subscriber station 26 transmits from a second operational area that is different from and sufficiently geographically separated from a first operational area, a first composite fingerprint associated with the first operational area is likely to differ from a second composite fingerprint associated with the second operational area in a statistically significant manner.²³

Accordingly, in step S104 of FIG. 2A, the operational composite fingerprint may be compared with a previously computed characteristic composite fingerprint to determine whether the subscriber station is operating outside of an authorized operational area.²⁴

²⁰ Page 14, lines 18-21 of the Specification.

²¹ Page 9, line 29-page 10, line 4 of the Specification.

²² Page 9, lines 14-21 of the Specification.

²³ Page 9, lines 24-28 of the Specification.

²⁴ Page 10, lines 4-9 and page 14, line 29-page 15, line 4 of the Specification.

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

U.S. Application No. 09/517,059

Atty. Docket 29250-000322/US

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL:

Appellants seek the Board's review of the rejection of claims 1, 2, 18, and 19 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,711,000 to Ploeg et al. ("Ploeg"); and of claims 3 and 20-22 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,711,000 to Ploeg et al. ("Ploeg") in view of U.S. Patent No. 6,026,304 to Hilsenrath et al. ("Hilsenrath").

VII. ARGUMENTS:

A. Appellants traverse the rejection of claims 1, 2, 18, and 19 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,711,000 to Ploeg et al. ("Ploeg").

Claims 1-3 and 18-22 rise and fall together.

i. Claim 1:

Ploeg is directed to a topology verification process for controlling a personal communication services system.²⁵ Spatial relationships of the base stations (CFPs) are mapped using Received Signal Strength Indication (RSSI) vectors, which result from test signals transmitted between the base stations (CFPs), to establish the topology of the system. The mapping process is repeated after any disruption of power to the system, and the topology results are compared. Any significant change in the topology results is indicative of a potential change in the geographic area of operation of the system, and can be used to initiate disablement of the system operation. Ploeg does not, however, provide any teaching or suggestion of an operational composite fingerprint of a "mobile subscriber

²⁵ See Abstract of Ploeg.

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

U.S. Application No. 09/517,059

Atty. Docket 29250-000322/US

station", nor a characteristic composite fingerprint associated with an "authorized area", as set forth in claim 1. Ploeg is directed to the positioning of base stations (CFPs).

With regard to Fig. 1, Ploeg discloses a PCS system including seven Cordless Fixed Parts (CFPs) 10a – 10g, which are connected to a central control unit (CCU).²⁶ Each of the CFPs 10 function as an individual base station, transmitting and receiving signals to and from cordless portable parts (CPPs) or mobile stations 18a-18d.²⁷

Fig. 2 illustrates the topology verification process of Ploeg. Three CFPs 10r, 10s, and 10t are illustrated. CFPs 10r and 10s are positioned 20.0 meters from one another, CFPs 10s and 10t are positioned 30.0 meters from one another, and CFPs 10r and 10t are positioned 40.0 meters from one another.²⁸ Each CFP 10 transmits a test signal under control of the CCU 14 in order to establish an RSSI signature during an initialization sequence.²⁹ This test signal is received by other CFPs 10, and the RSSI data received from each CFP 10 is recorded by the CCU 14, which creates an RSSI vector for each CFP 10.

Subsequently, an RSSI signature is formed using at least a sample of the RSSI vectors.³⁰ The RSSI signature generally captures a spatial relationship perspective of the system.³¹ After a power disruption, or a determined interval, received RSSI data is utilized to generate an RSSI Test result in a manner similar to the determination of the RSSI signature.³² The RSSI Test result is compared to the RSSI signature in order to

²⁶ See Ploeg, col. 3, ll. 54-59.

²⁷ See Ploeg col. 3, ll. 64-67.

²⁸ See Ploeg, col. 4, ll. 53-56.

²⁹ See Ploeg, col. 5, ll. 5-7.

³⁰ See Ploeg, col. 5, ll. 10-12.

³¹ See Ploeg, col. 5, ll. 46-48.

³² See Ploeg, col. 5, ll. 13-15.

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determine if there is a significant difference between the RSSI Test result and the RSSI signature.³³

In the event there is a significant difference, it is determined that one or more of the CFPs 10 has geographically moved.³⁴ A control signal from the CCU 14 subsequently disables all of the CFPs 10.

As discussed above, Ploeg is directed to determining a spatial relationship between multiple base stations (CFPs) in a Personal Communication System (PCS) system, which includes both base stations (CFPs) and mobile stations (CPPs). Ploeg is concerned with base station signals and does not disclose anything, which could even remotely be construed as determining if a mobile subscriber station is operating within an "authorized area"³⁵. Thus, Ploeg cannot disclose or suggest determining if the "mobile subscriber station is operating within the authorized area", as set forth in claim 1.³⁶

Based on the foregoing, Appellants assert that even assuming *arguendo* that the teachings of Ploeg could be incorporated into a mobile station as asserted by the Examiner³⁷, which Appellants do not admit for at least the reasons set forth below, Ploeg still fails to make any mention or suggestion of an "authorized area", as set forth in claim 1. Instead, as discussed above, Ploeg is concerned with the determination of the spatial relationships between multiple base stations (CFPs), making no mention or suggestion of any "authorized area", with which any fingerprint is associated.

³³ See Ploeg, col. 5, ll. 16-17.

³⁴ See Ploeg, col. 5, ll. 19-21.

³⁵ See claim 1 of the present application.

³⁶ See page 2 of the August 3, 2004 Final Office Action, where the Examiner admits Ploeg does not disclose a the application of his method to a "mobile subscriber station".

³⁷ See page 2 of the August 3, 2004 Final Office Action.

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

U.S. Application No. 09/517,059

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Accordingly, Ploeg cannot teach or suggest a “characteristic composite fingerprint” associated with an “authorized area”, as set forth in claim 1.

Further, Appellants submit that the Examiner has not supplied requisite evidence to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a).

The Examiner acknowledges that Ploeg does not teach or suggest an application of his method to a “mobile subscriber station”³⁸, but alleges it would have been obvious to the skilled artisan to “incorporate the method in a mobile subscriber station”³⁹. The Examiner does not cite any motivation for modifying the teachings of Ploeg⁴⁰, but instead the Examiner submits:

...it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method in a mobile subscriber station as Ploeg's subscriber station (cordless fixed part) and a mobile subscriber station both have transceiver functionality. Either a fixed station or a mobile station can generate the composite fingerprints, as only transceiver functionality is required to do so.⁴¹

From the above statement by the Examiner, it appears the Examiner alleges that it would have been obvious to incorporate the method of Ploeg into a mobile subscriber station because a base station and a mobile station “both have transceiver functionality”, and “only transceiver functionality is required to [generate composite fingerprints]”.⁴² However, Appellants strongly disagree with the Examiner's conclusion. This

³⁸ See claim 1 of the present application.

³⁹ See claim 1 of the present application.

⁴⁰ See page 2 of the August 3, 2004 Final Office Action.

⁴¹ See page 2 of the August 3, 2004 Final Office Action.

⁴² See page 2 of the August 3, 2004 Final Office Action.

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

U.S. Application No. 09/517,059

Atty. Docket 29250-000322/US

reasoning by the Examiner is a classic "could have" combined argument: The test for obviousness, however, is "would have." The Examiner has provided no reason as to why one of ordinary skill in the art would have incorporated the topology verification process for seldom moved base stations into constantly moving mobile subscriber stations.

Appellants submit that the Examiner has not supplied evidence of the necessary motivation needed to lead one of ordinary skill in the art to modify the teachings of Ploeg as forth in two cases decided by the Court of Appeals for the Federal Circuit (CAFC), *In re Dembiczkak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir. 1999) and *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed.Cir. 2000). Instead, it appears the Examiner has made use of impermissible hindsight reconstruction. It appears the Examiner has used the present application as a blueprint, and then alleged that Ploeg could be modified to include the missing elements without identifying or discussing any specific evidence of motivation to modify Ploeg.

As such, a *prima facie* case of obviousness has not been properly established. Therefore, Appellants assert that claims 1 and 2 are allowable for at least the reasons above.

ii. Claim 18:

Claim 18 defines a system, which performs the method as set forth in claim 1. More specifically, claim 18 includes "a monitor"⁴³, which performs the monitoring step of claim 1, and "a processor"⁴⁴, which performs the determining step of claim 1. As is clear from the discussion of claim 1 above, at least these functions (as recited in claim 18), in combination with

⁴³ See claim 18 of the present application.

⁴⁴ See claim 18 of the present application.

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

U.S. Application No. 09/517,059

Atty. Docket 29250-000322/US

the other features defined by claim 18, are not taught or suggested by the prior art relied upon by the Examiner. Further, as shown above, the Examiner has not established a proper *prima facie* case of obviousness based on Ploeg.

B. Appellants traverse the rejection of claims 3 and 20-22 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,711,000 to Ploeg et al. ("Ploeg") in view of U.S. Patent No. 6,026,304 to Hilsenrath et al. ("Hilsenrath").

i. Claims 3 and 20-22:

As discussed above, Ploeg does not anticipate or render claim 1 or claim 18 obvious to one of ordinary skill in the art. Further, Appellants assert that even assuming *arguendo* that Ploeg and Hilsenrath could be combined, Hilsenrath would still fail to make up for the deficiencies of Ploeg with respect to claims 1 and 18. Therefore, claims 3 and 20-22, dependent on claims 1 and 18, are patentable over Ploeg and Hilsenrath for at least the reasons stated above with respect to claims 1 and 18.

VIII. Conclusion:

Appellants respectfully request the Board to reverse the Examiner's anticipation and/or obviousness rejection of claims 1-3 and 18-22.

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

U.S. Application No. 09/517,059

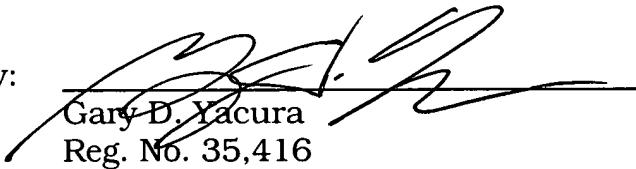
Atty. Docket 29250-000322/US

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By:


Gary D. Yacura
Reg. No. 35,416

GDY/AMW:jcp

AM

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

CLAIMS APPENDIX

Claims 1-3 and 18-22 on Appeal:

1. A method for monitoring whether a mobile subscriber station is operating in an authorized area of the mobile subscriber station, the method comprising:

monitoring an operational composite fingerprint of the mobile subscriber station; and

comparing the operational composite fingerprint to a characteristic composite fingerprint of the mobile subscriber station to determine if the mobile subscriber station is operating within the authorized area; the characteristic composite fingerprint being associated with the authorized area.

2. The method according to claim 1 further comprising, prior to the comparing step, the step of defining the characteristic composite fingerprint for the mobile subscriber station associated with operating in the authorized area.

3. The method according to claim 2 wherein the defining step comprises organizing a first histogram of observations of propagational delays associated with a reverse link transmission of the mobile subscriber station from the authorized area.

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

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18. A system for monitoring whether a mobile subscriber station is operating in an authorized area of the mobile subscriber station, the system comprising:

 a monitor for monitoring an operational composite fingerprint of the mobile subscriber station; and

 a processor for comparing the operational composite fingerprint to a characteristic composite fingerprint of a mobile subscriber station to determine if the mobile subscriber station is operating within the authorized area; the characteristic composite fingerprint being associated with the authorized area.

19. The system according to claim 18 further comprising a storage device for storing the characteristic composite fingerprint for a mobile subscriber station associated with operating in the authorized area.

20. The system according to claim 18 wherein the monitor comprises an antenna monitor for monitoring the number of temporally offset receive signals, originating from a transmission of the mobile subscriber station, incident upon each distinct uplink antenna set of a base station.

21. The system according to claim 18 wherein the monitor comprises a propagational delay measurer for measuring the propagational delays of temporally offset receive signals originating from a transmission of the mobile subscriber station.

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22. The system according to claim 18 wherein the characteristic composite fingerprint includes a first histogram of observations of propagational delays associated with a reverse link transmission of the mobile subscriber station from the authorized area.